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Sequence Listing was accepted.

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Reviewer: markspencer

Timestamp: [year=2011; month=3; day=16; hr=9; min=26; sec=11; ms=367; ]

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Application No: 10581106 Version No: 1.0

Input Set:

Output Set:

Started: 2011-03-03 20:05:13.518  
Finished: 2011-03-03 20:05:16.689  
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 171 ms  
Total Warnings: 133  
Total Errors: 0  
No. of SeqIDs Defined: 133  
Actual SeqID Count: 133

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**Input Set:**

**Output Set:**

**Started:** 2011-03-03 20:05:13.518  
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Error code

Error Description

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<110> Genencor International, Inc.  
 Fox, Judith A.  
 Harding, Fiona A.  
 Schellenberger, Volker

<120> CAB Molecules

<130> GC822-PCT

<140> 10581106

<141> 2011-03-03

<150> PCT/US2004/041429

<151> 2004-12-10

<150> US 60/529,354

<151> 2003-12-12

<150> US 60/577,255

<151> 2004-04-06

<160> 133

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20 25 30

Tyr Met His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
35 40 45

Xaa Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Lys Phe  
50 55 60

Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
130 135 140

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Ala  
145 150 155 160

Ser Ser Ser Val Ser Tyr Met His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
165 170 175

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Thr Ser Asn Leu Ala Ser Xaa Xaa  
180 185 190

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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35 40 45

Gly Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Lys Phe  
50 55 60

Gln Gly Lys Ala Thr Phe Thr Thr Asp Thr Ser Ser Asn Thr Ala Tyr  
65 70 75 80

Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Asn Glu Gly Thr Pro Thr Gly Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln  
100 105 110

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly  
115 120 125

Gly Ser Gly Gly Gly Gly Ser Glu Asn Val Leu Thr Gln Ser Pro Ala

130

135

140

Ile Met Ser Ala Ser Pro Gly Glu Lys Val Thr Ile Thr Cys Ser Ala  
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Ser Ser Ser Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Thr  
165 170 175

Ser Pro Lys Leu Trp Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val  
180 185 190

Pro Ala Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr  
195 200 205

Ile Ser Arg Met Glu Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln  
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Arg Ser Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu  
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Lys Arg Ala Ala Thr Pro Val Ser Glu Lys Gln Leu Ala Glu Val Val  
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Ala Asn Thr Ile Thr Pro Leu Met Lys Ala Gln Ser Val Pro Gly Met  
260 265 270

Ala Val Ala Val Ile Tyr Gln Gly Lys Pro His Tyr Tyr Thr Phe Gly  
275 280 285

Lys Ala Asp Ile Ala Ala Asn Lys Pro Val Thr Pro Gln Thr Leu Phe  
290 295 300

Glu Leu Gly Ser Ile Ser Lys Thr Phe Thr Gly Val Leu Gly Gly Asp  
305 310 315 320

Ala Ile Ala Arg Gly Glu Ile Ser Leu Asp Asp Ala Val Thr Arg Tyr  
325 330 335

Trp Pro Gln Leu Thr Gly Lys Gln Trp Gln Gly Ile Arg Met Leu Asp  
340 345 350

Leu Ala Thr Tyr Thr Ala Gly Gly Leu Pro Leu Gln Val Pro Asp Glu  
355 360 365

Val Thr Asp Asn Ala Ser Leu Leu Arg Phe Tyr Gln Asn Trp Gln Pro  
370 375 380

Gln Trp Lys Pro Gly Thr Thr Arg Leu Tyr Ala Asn Ala Ser Ile Gly  
385 390 395 400

Leu Phe Gly Ala Leu Ala Val Lys Pro Ser Gly Met Pro Tyr Glu Gln  
405 410 415

Ala Met Thr Thr Arg Val Leu Lys Pro Leu Lys Leu Asp His Thr Trp  
420 425 430

Ile Asn Val Pro Lys Ala Glu Glu Ala His Tyr Ala Trp Gly Tyr Arg  
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Asp Gly Lys Ala Val Arg Val Ser Pro Gly Met Leu Asp Ala Gln Ala  
450 455 460

Tyr Gly Val Lys Thr Asn Val Gln Asp Met Ala Asn Trp Val Met Ala  
465 470 475 480

Asn Met Ala Pro Glu Asn Val Ala Asp Ala Ser Leu Lys Gln Gly Ile  
485 490 495

Ala Leu Ala Gln Ser Arg Tyr Trp Arg Ile Gly Ser Met Tyr Gln Gly  
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Leu Gly Trp Glu Met Leu Asn Trp Pro Val Glu Ala Asn Thr Val Val  
515 520 525

Glu Thr Ser Phe Gly Asn Val Ala Leu Ala Pro Leu Pro Val Ala Glu  
530 535 540

Val Asn Pro Pro Ala Pro Pro Val Lys Ala Ser Trp Val His Lys Thr  
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Gly Ser Thr Gly Gly Phe Gly Ser Tyr Val Ala Phe Ile Pro Glu Lys  
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Gln Ile Gly Ile Val Met Leu Ala Asn Thr Ser Tyr Pro Asn Pro Ala  
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35 40 45

Ala Ala Asn Lys Pro Val Thr Pro Gln Thr Leu Phe Glu Leu Gly Ser  
50 55 60

Ile Ser Lys Thr Phe Thr Gly Val Leu Gly Gly Asp Ala Ile Ala Arg  
65 70 75 80

Gly Glu Ile Ser Leu Asp Asp Ala Val Thr Arg Tyr Trp Pro Gln Leu  
85 90 95

Thr Gly Lys Gln Trp Gln Gly Ile Arg Met Leu Asp Leu Ala Thr Tyr  
100 105 110

Thr Ala Gly Gly Leu Pro Leu Gln Val Pro Asp Glu Val Thr Asp Asn  
115 120 125

Ala Ser Leu Leu Arg Phe Tyr Gln Asn Trp Gln Pro Gln Trp Lys Pro  
130 135 140

Gly Thr Thr Arg Leu Tyr Ala Asn Ala Ser Ile Gly Leu Phe Gly Ala  
145 150 155 160

Leu Ala Val Lys Pro Ser Gly Met Pro Tyr Glu Gln Ala Met Thr Thr  
165 170 175

Arg Val Leu Lys Pro Leu Lys Leu Asp His Thr Trp Ile Asn Val Pro  
180 185 190

Lys Ala Glu Glu Ala His Tyr Ala Trp Gly Tyr Arg Asp Gly Lys Ala  
195 200 205

Val Arg Val Ser Pro Gly Met Leu Asp Ala Gln Ala Tyr Gly Val Lys  
210 215 220

Thr Asn Val Gln Asp Met Ala Asn Trp Val Met Ala Asn Met Ala Pro  
225 230 235 240

Glu Asn Val Ala Asp Ala Ser Leu Lys Gln Gly Ile Ala Leu Ala Gln  
245 250 255

Ser Arg Tyr Trp Arg Ile Gly Ser Met Tyr Gln Gly Leu Gly Trp Glu  
260 265 270

Met Leu Asn Trp Pro Val Glu Ala Asn Thr Val Val Glu Thr Ser Phe  
275 280 285

Gly Asn Val Ala Leu Ala Pro Leu Pro Val Ala Glu Val Asn Pro Pro  
290 295 300

Ala Pro Pro Val Lys Ala Ser Trp Val His Lys Thr Gly Ser Thr Gly  
305 310 315 320

Gly Phe Gly Ser Tyr Val Ala Phe Ile Pro Glu Lys Gln Ile Gly Ile  
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20

25

30

Tyr Met His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

35

40

45

Xaa Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Lys Phe  
50 55 60

Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
65 70 75 80

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
85 90 95

Xaa Xaa Gly Leu Pro Thr Gly Pro Tyr Tyr Phe Asp Tyr Xaa Xaa Xaa  
100 105 110

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
115 120 125

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
130 135 140

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Ala  
145 150 155 160

Ser Ser Ser Val Ser Tyr Met His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
165 170 175

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Thr Ser Asn Leu Ala Ser Xaa Xaa  
180 185 190

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
195 200 205

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln Gln  
210 215 220

Arg Asp Ser Tyr Pro Leu Thr  
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115 120 125

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
130 135 140

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Ala  
145 150 155 160

Ser Ser Ala Val Tyr Ala Met His Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
165 170 175

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Asp Thr Ser Asn Leu Ala Ser Xaa Xaa  
180 185 190

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa  
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Tyr Met His Trp Val Arg Gln Gly Pro Glu Gln Gly Leu Glu Trp Ile

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Gly Trp Ile Asp Pro Glu Asn Gly Asp Thr Glu Tyr Ala Pro Lys Phe  
50 55 60

Gln Gly Lys Ala Thr Phe Thr Thr Asp Thr Ser Ser Asn Thr Ala Tyr  
65 70 75 80

Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95

Asn Glu Gly Leu Pro Thr Gly Pro Tyr Tyr Phe Asp Tyr Trp Gly Gln  
100 105 110

Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Gly Ser Gly Gly Gly  
115 120 125

G1